

## 14.0 Acronyms and Abbreviations

°C	degree(s) Celsius
°F	degree(s) Fahrenheit
AAI	All Appropriate Inquiry
AASHTO	American Association of State Highway and Transportation Officials
AB	(California) Assembly Bill
AB 1493	Assembly Bill 1493
AB 32	Assembly Bill 32
ac	acre(s)
AC	alternating current
ACGIH	American Conference of Government Industrial Hygienists, Inc.
ACHP	Advisory Council on Historic Preservation
ACM	asbestos-containing material
ACS	U.S. American Community Survey
ADA	Americans with Disabilities Act
ADRP	archeological data recovery program
ADT	average daily traffic
aka	also known as
ALUCP	Airport Land Use Compatibility Plan
AMP	Airport Master Plan
ANSI	American National Standards Institute
APCD	air pollution control district
APE	area of potential effect
APN	Assessor's Parcel Number
APS	alternate planning strategy
APTA	American Public Transportation Association

AQMD	air quality management district
AREMA	American Railway Engineers and Maintenance of Way Association
ARPA	Archaeological Resources Protection Act
AST	aboveground storage tank
ASTM	American Society for Testing and Materials
AT&SF	Atchison, Topeka, and Santa Fe
ATC	automatic train control
ATCM	Airborne Toxic Control Measure
ATP	Archaeological Treatment Plan
Authority	California High-Speed Rail Authority
B&B	Brown and Bryant
B.P.	year(s) before the present
BACT	best available control technology
BART	Bay Area Rapid Transit
Basin Plan	Water Quality Control Plan for the Tulare Lake Basin
Bay Area	San Francisco Bay Area
BETP	built-environment treatment plan
BFD	Bakersfield Fire Department
Bgs	below ground surface
BIOS	Biogeographic Information and Observation System
BLM	Bureau of Land Management
BMP	best management practice
BNSF	Burlington Northern & Santa Fe Railway
BRMP	Biological Resources Management Plan
Btu	British thermal unit
C&D	construction and demolition

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CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE	corporate average fuel economy
CAG	County Association of Governments
Cal EMA	California Emergency Management Agency
CAL FIRE	California Department of Forestry and Fire Protection
Cal-EPA	California Environmental Protection Agency
Cal-ISO	California independent system operator
Cal-OSHA	California Occupational Safety and Health Administration
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CASQA	California Stormwater Quality Association
CBOC	California Burrowing Owl Consortium
CCAA	California Clean Air Act
CCR	California Code of Regulations
CCTV	closed-circuit television
CDFA	California Department of Food and Agriculture
CDFC	California Fish and Game Code
CDFG	California Department of Fish and Game
CDMG	California Division of Mines and Geology
CDP	census designated place
CDSM	cement deep soil mixing
CEC	California Energy Commission
CEDD	California Employment Development Department

CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFC	chlorofluorocarbon
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH <sub>4</sub>	methane
CHA	collision hazard analysis
CHRIS	California Historical Resources Information System
CHSRA	California High-Speed Rail Authority
CIDH	cast-in-drill hole
CLUP	Compatible Land Use Plan
Cm	centimeter(s)
CMP	Congestion Management Plan
CMS	changeable message signs
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNG	compressed natural gas
CNPS	California Native Plant Society
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CO <sub>2e</sub>	carbon dioxide equivalents
COG	Council of Governments
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources

CRWQCBVR	California Regional Water Quality Control Board, Central Valley Region
CS	Cambridge Systematics, Inc.
CSHC	California Streets and Highway Code
CSHP	construction safety and health plan
CSE	Countywide Siting Element
CT	computed tomography
CTS	California tiger salamander
CUPA	Certified Unified Program Agency
CVFPB	Central Valley Flood Protection Board
CVP	Central Valley Project
CVR	Cross Valley Railroad
CWA	Clean Water Act
CWHR	California Wildlife Habitat Relationship System
D/B	design-build
dB	decibel(s)
dBA	A-weighted decibel(s)
DC	direct current
DCE	dichloroethylene
DDD	dichlorodiphenyldichloroethane
DDE	dichlorodiphenyldichloroethylene
DDT	dichlorodiphenyltrichloroethane
DE	diesel exhaust
DEIR/DEIS	Draft Environmental Impact Report/Draft Environmental Impact Statement
DHS	U.S. Department of Homeland Security
DOC	Department of Conservation
DOF	Department of Finance

DOGGR	(California) Division of Oil, Gas, and Geothermal Resources
DOT	U.S. Department of Transportation
DPM	diesel particulate matter
DPR	Department of Parks and Recreation
DSOD	Division of Safety of Dams
DTSC	Department of Toxic Substances Control
DWR	California Department of Water Resources
EDMS	Emission and Dispersion Modeling System
EDR	Environmental Data Resources, Inc.
EIR	environmental impact report
EIS	environmental impact statement
EJ	environmental justice
ELF	extremely low frequency
EMC	Electromagnetic Compatibility
EMCPP	Electromagnetic Compatibility Control Plan
EMF	electromagnetic field
EMFAC	emission factors model
EMI	electromagnetic interference
EMT	emergency medical technician
EMU	electric multiple unit
EO	Executive Order
EOI	Expressions of Interest
EOP	emergency operating procedure
EPA	U.S. Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
ER	ecological reserve

ERA	environmentally restricted area
ERF	Effective Response Force
ESA	environmentally sensitive area
ESA	Environmental Site Assessment
ESRP	Endangered Species Recovery Program
ESU	evolutionary significant unit
FAA	Federal Aviation Administration
FAT	Fresno Air Terminal
FCC	Federal Communications Commission
Fed. Reg.	Federal Register
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FIRE	finance, insurance, and real estate
FLSP	fire/life safety program
FMFCD	Fresno Metropolitan Flood Control District
FMMP	Farmland Mapping and Monitoring Program
FPPA	Farmland Protection Policy Act
FRA	Federal Railroad Administration
Fresno COG	Council of Fresno County Governments
FSZ	Farmland Security Zone
ft	foot (feet)
FTA	Federal Transit Administration
FTIP	Federal Transportation Improvement Programs
FUSD	Fresno Unified School District

g	acceleration of gravity
G	gauss
GAMAQI	Guide for Assessing and Mitigating Air Quality Impacts
GC	general conformity
GET	Golden Empire Transit
GHG	greenhouse gas
GHz	gigahertz
GIS	geographic information system
GNIS	geographic names information system
Gpd	gallon(s) per day
Gpm	gallon(s) per minute
GPS	global positioning system
GWh	gigawatt-hour
GWP	global warming potential
HABS	Historic American Building Survey
HAER	Historic American Engineering Record
HALS	Historic American Landscape Survey
HASR	Historic Architectural Survey Report
Hazmat	hazardous material
HCM	Highway Capacity Manual
HCP	habitat conservation plan
HF	high frequency
HFE	hydrofluorinated ether
HMF	heavy maintenance facility
HMMP	Habitat Mitigation and Monitoring Plan
HOV	high-occupancy vehicle

Hp	horsepower
HPSR	Historic Properties Survey Report
HR	hydrologic region
HS	high speed
HSC	(California) Health and Safety Code
HSR	Historic Structure Report
HST	high-speed train
HUD	U.S. Department of Housing and Urban Development
Hz	hertz
I	interstate
IBC	International Building Code
ICC	International Code Council
ICE	InterCity Express
ICES	International Committee on Electromagnetic Safety
ID	Irrigation District
IEEE	Institute of Electrical and Electronic Engineers
IRIS	Integrated Risk Information System
ISR	Indirect Source Review
IT&TC	(Shafter) International Trade and Transportation Center
JRP	JRP Historical Consulting Services
KART	Kings Area Rural Transit
KCAG	Kings County Association of Governments
KCFD	Kern County Fire Department
KCOG	Kern Council of Governments
KHSD	Kern High School District
kHz	kilohertz

km	kilometer(s)
Kph	kilometer(s) per hour
KRCD	Kings River Conservation District
KRT	Kern Regional Transit
kV	kilovolt
kV/m	kilovolt(s) per meter
KVP	key viewpoint
KWH	kilowatt hour
LACM	Los Angeles County Museum of Natural History
LADWP	Los Angeles Department of Water and Power
LBP	lead-based paint
$L_{dn}$	day-night sound level, dBA
LEDPA	least environmentally damaging practicable alternative
LEED	Leadership in Energy and Environmental Design
LEP	limited English proficiency
$L_{eq}$	equivalent sound level, dBA
$L_{eq}(h)$	equivalent sound level for a 1-hour period, dBA
LESA	land evaluation and site assessment
$L_{max}$	maximum sound level, dBA
LOS	level of service
LOSSAN	Los Angeles to San Diego rail corridor
LPG	liquefied petroleum gas
LT	long-term measurement
LUST	leaking underground storage tank
LWCF	Land and Water Conservation Fund
$M^3$	cubic meter(s)

Maglev	magnetic levitation
MBHCP	Metropolitan Bakersfield Habitat Conservation Plan
MBTA	Migratory Bird Treaty Act
MCL	maximum contaminant level
mG	milligauss
mgd	million gallon(s) per day
MM	mitigation measure
MMAA	Master Mutual Aid Agreement
MMBtu	million Btu
MMcf	million cubic feet
MMRP	Mitigation Monitoring and Reporting Program
MMT	million metric tons
MOA	memorandum of agreement
MOU	memorandum of understanding
MOWF	maintenance-of-way facility
MPE	maximum permissible exposure
mpg	miles per gallon
mph	mile(s) per hour
MPO	Metropolitan Planning Organization
MRF	materials recovery facility
MRI	magnetic resonance imaging
MRZ	mineral resource zone
MS4	Municipal separate storm sewer system
MSAT	mobile-source air toxics
MTA	Metropolitan Transportation Authority
MTBE	methyl tertiary butyl ether

MW	megawatt
N <sub>2</sub> O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAC	noise abatement criteria
NAHC	Native American Heritage Commission
NASA	National Aeronautics and Space Administration
NAVD 88	North American Vertical Datum of 1988
NCCP	Natural Communities Conservation Plan
NCRP	National Council on Radiation Protection
NEPA	National Environmental Policy Act
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NF <sub>3</sub>	nitrogen trifluoride
NFPA	National Fire Protection Association
NHL	National Historic Landmark
NHPA	National Historic Preservation Act
NIEHS	National Institute of Environmental Health Sciences
NKWSD	North Kern Water Storage District
NMFS	National Marine Fisheries Service
NMR	nuclear magnetic resonance
NO	nitric oxide
NO <sub>2</sub>	nitrogen dioxide
NOA	naturally occurring asbestos
NOAA	National Oceanic and Atmospheric Administration
NOD	Notice of Determination
NOI	Notice of Intent
NOP	Notice of Preparation

NOR	North of the River Parks and Recreation District
NORSD	North of the River Sanitation District
NO <sub>x</sub>	nitrogen oxide(s)
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List (Superfund)
NPPA	Native Plant Protection Act
NPS	National Park Service
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NRPA	National Recreation and Park Association
NWI	National Wetlands Inventory
NWR	National Wildlife Refuge
O <sub>3</sub>	ozone
OCC	Operations Control Center
OCR	Open Space, Conservation, and Recreation Element
OCS	overhead contact system
OEHHA	Office of Environmental Health Hazard Assessment
OHP	(California) Office of Historic Preservation
OSHA	Occupational Safety and Health Administration
OSHPD	Office of Statewide Health Planning and Development
OXY	Occidental Petroleum Corporation
PA	programmatic agreement
PAH	polycyclic aromatic hydrocarbon
PARCS	Parks, After School, Recreation, and Community Services
Pb	lead
PCB	polychlorinated biphenyl

PCC	Portland Cement Concrete
PCE	perchloroethylene (synonym: tetrachloroethene)
PEC	potential environmental concern
PFC	perfluorocarbon
PG&E	Pacific Gas and Electric Company
PGA	peak ground acceleration
PHA	preliminary hazard analysis
PHMSA	(U.S. Department of Transportation) Pipeline and Hazardous Materials Safety Administration
PIM	public information meeting
PL	public law
PM	particulate matter
PM <sub>10</sub>	particulate matter smaller than or equal to 10 microns in diameter
PM <sub>2.5</sub>	particulate matter smaller than or equal to 2.5 microns in diameter
PMT	project management team
Ppm	part(s) per million
PPV	peak particle velocity
PRC	Public Resources Code
PRG	Preliminary Remediation Goal
PRM	paleontological resources monitor
PRMMP	Paleontological Resource Monitoring and Mitigation Plan
PRS	paleontological resources specialist
PTC	Positive Train Control
PTE	permission to enter
PTO	permit to operate
QI	Qualified Investigator
RCD	Resource Conservation District

RCM	Roadway Construction Model
RCRA	Resource Conservation and Recovery Act
RF	radio frequency
RFI	radio frequency interference
RHNA	Regional Housing Needs Assessment
RIMS	Regional Input-Output Modeling System
RMS	root mean square
ROD	Record of Decision
ROG	reactive organic gas
RP	responsible party
RRP	restoration and revegetation plan
RSA	Resource Study Area
RSAC	Railroad Safety Advisory Committee
RTAC	Regional Targets Advisory Committee
RTIP	Regional Transportation Improvement Program
RTP	Regional Transportation Plan
RTPA	Regional Transportation Plan Agency
RVLP	Rural Valley Lands Plan
RWQCB	Regional Water Quality Control Board
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SB	(California) Senate Bill
SBCM	San Bernardino County Museum
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCS	Soil Conservation Service
SCS	sustainable communities strategy

SEL	sound exposure level
SEM	scanning electron microscope
SEMS	Standardized Emergency Management System
SF <sub>6</sub>	sulfur hexafluoride
SFHA	Special Flood Hazard Area
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SJVR	San Joaquin Valley Railroad
SLIC	spills, leaks, investigations, and cleanup
SMAQMD	Sacramento Metropolitan Air Quality Management District
SO <sub>2</sub>	sulfur dioxide
SOI	Sphere of Influence
SOI	Secretary of Interior
SOP	standard operating procedure
SO <sub>x</sub>	sulfur oxide
SPCC	spill prevention, containment, and control
SR	State Route
SSJVIC	San Joaquin Valley Information Center
SSP	system security plan
SSPP	system safety program plan
ST	short-term measurement
Statewide Program EIR/EIS	Final Program Environmental Impact Report and Environmental Impact Statement of the Proposed California High-Speed Train System
STIP	State Transportation Improvement Program
STU	shovel test unit

SVE	soil-vapor extraction
SVF	South Valley Floor
SVP	Society of Vertebrate Paleontology
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
T	tesla
TAC	toxic air containment
TAG	Technical Assessment Group
TCAG	Tulare County Association of Governments
TCE	trichloroethene
TCP	traditional cultural property
TDM	Transportation Demand Management
TEM	transmission electron microscope
TERPS	Terminal Instrument Procedure Surfaces
TGV	Train à Grande Vitesse – European High-Speed Train
TIP	Transportation Improvement Plan
TMDL	total maximum daily load
TOD	transit-oriented development
TOG	total organic gas
TPH	total petroleum hydrocarbon
TPS	traction power substation
TPSS	traction power supply system
TRIP	Thomas Roads Improvement Program
TSA	(U.S.) Transportation Security Administration
TVA	threat and vulnerability assessment
TWG	Technical Working Group

U.S. EPA	U.S. Environmental Protection Agency
U.S.C.	U.S. Code
UCMP	University of California, Berkeley, Museum of Paleontology
ULSD	ultra-low sulfur diesel fuel
UPRR	Union Pacific Railroad
URBEMIS	Urban Emissions Model
URS	URS Corporation
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
USPS	U.S. Postal Service
UST	underground storage tank
V/C	volume to capacity ratio (used to help define the level of service or operating condition)
Valley Blueprint	San Joaquin Valley Blueprint
VdB	vibration velocity level
VELB	valley elderberry longhorn beetle
VFHCP	Valley Floor Habitat Conservation Plan
VHF	very high frequency
VHS	very high speed
VMT	vehicle miles traveled
VOC	volatile organic compound
VSA	vibration sensitive area
WCD	Water Conservation District
WEAP	Worker Environmental Awareness Program
WiFi	wireless fidelity

WiMAX	worldwide interoperability for microwave access
WRAPP	Wetland and Riparian Area Protection Policy
WRCC	Western Regional Climate Center
WSA	water service area
WWTP	wastewater treatment plant
XPI	Extended Phase I
µg	Microgram
µT	Microtesla

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**CALIFORNIA**  
High-Speed Rail Authority



U.S. Department  
of Transportation  
Federal Railroad  
Administration